

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Ludmila Cherkasova et al.

Confirmation No.:

Application No.: 10/660,978

Examiner:

Filing Date: Sept. 12, 2003

Group Art Unit:

Title: SYSTEM AND METHOD FOR EVALUATING A CAPACITY OF A STREAMING MEDIA SERVER FOR SUPPORTING A WORKLOAD

Commissioner for Patents

PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

(X) under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)

() under 37 CFR 1.97 (c) together with either a:
() Statement under 37 CFR 1.97(e), or
() a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)

() under 37 CFR 1.97 (d) together with a:
() Statement under 37 CFR 1.97(e)(1) or (2), and
() a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

(X) Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

() A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: Sept. 30, 2003
OR

() I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number _____ on _____.
Number of pages: _____

Typed Name: John Pallivathukal

Signature: John Pallivathukal

Respectfully submitted,

Ludmila Cherkasova et al.

By



Jody C. Bishop

Attorney/Agent for Applicant(s)
Reg. No. 44,034

Date: Sept. 30, 2003

Telephone No.: (214) 855-8007



PATENT APPLICATION

Sheet 1 of 4

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		ATTY. DOCKET NO. 200313317-1	APPLICATION NO. 10/660,978	CONFIRMATION NO.
		APPLICANT Ludmila Cherkasova et al.		
		FILING DATE Sept. 12, 2003	GROUP	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
1A	10/306,279		Cherkasova et al.	
1B	5,603,029	02/11/1997	Aman et al.	
1C	5,732,239	03/24/1998	Togabi et al.	
1D	5,734,119	03/31/1998	France et al.	
1E	5,815,662	09/29/1998	Ong	
1F	5,953,707	09/14/1999	Huang et al.	
1G	6,067,107	05/23/2000	Travaille et al.	
1H	6,101,547	08/08/2000	Mukherjee et al.	
1I	6,178,480	01/23/2001	Togabi et al.	
1J	6,263,361	07/17/2001	Hoyer et al.	
1K	6,279,039	08/21/2001	Bhat et al.	

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L					
	1M					
	1N					
	1O					
	1P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	CHERKOSOVA, L. et al., "Building a Performance Model of Streaming Media Applications in Utility Data Center Environment," Hewlett-Packard Laboratories, Internet Systems and Storage Lab, 12 pages
1R	CHASE, J. et al., "Managing Energy and Server Resources in Hosting Centers," Dept. of Computer Science, Duke University, 14 pages
1S	EAGER, D. et al., "Optimal and Efficient Merging Schedules for Video-on-Demand Servers," Proc. ACM Multimedia 1999, 4 pages

EXAMINER

DATE CONSIDERED



FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.
200313317-1APPLICATION NO.
10/660,978

CONFIRMATION NO.

APPLICANT

Ludmila Cherkasova et al.

FILING DATE

GROUP

Sept. 12, 2003

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
2A	6,292,834	09/18/2001	Ravi et al.	
2B	6,356,947	03/12/2002	Lutterschmidt	
2C	6,434,621	08/13/2002	Pezzillo et al.	
2D	6,438,592	08/20/2002	Killian	
2E	6,571,288	05/27/2003	Sarukkai	
2F	6,606,658	08/12/2003	Uematsu	
2G	2002/0083124	06/27/2002	Knox et al.	
2H	2002/0091722	07/11/2002	Gupta et al.	
2I	2002/0129048	09/12/2002	Qiu et al.	
2J	2002/0150102	10/17/2002	Janko et al..	
2K	2002/0156552	10/24/2002	Whiting	

FOREIGN PATENT DOCUMENTS

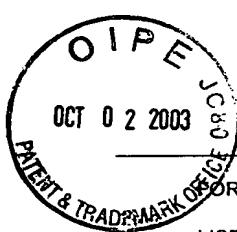
		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	2L					
	2M					
	2N					
	2O					
	2P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

2Q	NAHRSTEDT, K. et al., "A Probe-based Algorithm for QoS Specification and Adaptation," Univ. of Illinois at Urbana Champaign, pages 1 - 12
2R	NAHRSTEDT, K. et al., "QoS-Aware Resource Management for Distributed Multimedia Applications," Univ. of Illinois at Urbana Champaign, Dept. of Computer Science, pages 1-37
2S	RANJAN, S. et al., "QoS-Driven Server Migration for Internet Data Centers," Proc. of IWQoS 2002, 10 pages

EXAMINER

DATE CONSIDERED



OCT 02 2003

PATENT APPLICATION

Sheet 3 of 4

ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
200313317-1	10/660,978	
APPLICANT	Ludmila Cherkasova et al.	
FILING DATE	GROUP	
Sept. 12, 2003		

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

REFERENCE DESIGNATION **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
3A	2003/0097443	05/22/2003	Gillett et al.	
3B	2003/0115244	06/19/2003	Molloy et al.	
3C	10/601,992		Cherkasova et al.	
3D	10/601,956		Cherkasova et al.	
3E				
3F				
3G				
3H				
3I				
3J				
3K				

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
3L					
3M					
3N					
3O					
3P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	SHENOY, P. et al., "Middleware versus Native OS Support: Architectural Considerations for Supporting Multimedia Applications," Univ. of Massachusetts, Dept. of Computer Science, 10 pages
3R	ACHARYA, S. et al., "Characterizing User Access To Videos On The World Wide Web," Part of the IS&T/SPIE Conference on Multimedia computing and Networking 2000, SPIE Vol. 3969, 2000, pages 130-141
3S	ALMEIDA, J. et al., "Analysis of Educational Media Server Workloads," Proc. 11th Int'l. Workshop, 2001, 10 pages

EXAMINER

DATE CONSIDERED



PATENT APPLICATION

Sheet 4 of 4

FORM PTO-1449

**LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

APPLICATION NO.
10/660,978

CONFIRMATION NO.

APPLICANT

Ludmila Cherkasova et al.

FILING DATE

GROUP

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
4A				
4B				
4C				
4D				
4E				
4F				
4G				
4H				
4I				
4J				
4K				

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	4L					
	4M					
	4N					
	4O					
	4P					

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	4Q	DAN, A. et al., "Buffering and Caching in Large-Scale Video Servers," IEEE 1995, pgs 217-224
	4R	KIM, I. et al., "VBR Video Data Scheduling using Window-Based Prefetching," IEEE 1999, pgs 159-164
	4S	CHERKASOVA, L. et al., "Characterizing Locality, Evolution, and Life span of Accesses in Enterprise Media Server Workloads," NOSSDAV '02, May 12-14, 2002, 10 pages
EXAMINER		DATE CONSIDERED